

IN THE SPECIFICATION

Please replace the paragraph at page 2, lines 2-7, with the following rewritten paragraph:

A1  
The present invention also relates to a phase-change recording medium for use in the information recording apparatus, the information reproducing apparatus, the information recording and reproducing apparatus, the information recording method, and the information reproducing method.

Please replace the paragraph at page 27, line 22, to page 28, line 11, with the following rewritten paragraph:

A2  
The portion B in (b) in FIG. 4 indicates another example of controlling the track-direction recording mark length by changing the retention time of at least one power level in accordance with the multi-leveled information to be recorded. In this example, the recording power level  $P_w$  or the bias power level  $P_b$  is changed stepwise into a plurality of levels with respect to the power level retention time thereof (which corresponds to the pulse width thereof)  $T_w$  or  $T_b$ . The portion B in (b) in FIG. 4 indicates a preferable example in which both [[TW]]  $T_w$  and  $T_b$  are changed, with the ratio of the respective retention times of  $T_w/T_b$  being set in a range of 0.3 to 1.5.

Please replace the paragraph at page 28, line 12, to page 29, line 1, with the following rewritten paragraph:

A3  
When a recording mark M with a short track-direction recording mark length is formed, the power level retention times, [[TW]]  $T_w$  and  $T_b$ , are shortened, while when a recording mark M with a long track-direction recording mark length is formed, the power level retention times, [[TW]]  $T_w$  and  $T_b$ , are lengthened. By lengthening the power level

retention time  $T_w$ , the track-direction recording mark length of the recording mark M is increased, and by lengthening the power level retention time  $T_b$ , the cooling time is lengthened, so that the track-direction recording mark length of the recording mark M is further increased, with the rear edge portion  $M_e$  of the recording mark M being elongated.

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A3  
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